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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,025	10/10/2001	Geert Maertens	2752-56	7266

7590 10/22/2002
NIXON & VANDERHYE P.C.
8th Floor
1100 North Glebe Road
Arlington, VA 22201-4714

EXAMINER

LI, BAO Q

ART UNIT	PAPER NUMBER
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1648

DATE MAILED: 10/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,025

Applicant(s)

MAERTENS ET AL.

Examiner

Bao Qun Li

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 49-99 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 49-99 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Preliminary amendment has been acknowledged. Claims 1-49 have been canceled and new claims 49-99 have been added.

Election/Restriction

Restriction to one of the following inventions groups is required under 35 U.S.C. 121:

- I. Claims 49-54, 57, 58, 59, 60, 61, 87-99, drawn to an isolated monoclonal antibody and a kit for detecting an HCV envelope antigen, classified in class 530, subclass 388.3.

If either of Groups I is elected, applicants are required to further select one of the antibody against one of the following antigen respectively on the merit. This is not related to the species selection, because each of the antibodies has its own patentable weight and constitutes a distinctive invention.

(1). The nucleotide sequence used as antigen stating at the position between 1-192 and ending between 250-400 of E1 protein and stating position between 290-406 and ending between 600-820 of E2 protein (a) and (e)

(2). The nucleotide sequence used as antigen stating at the position between 117-192 and ending between 263-400.

(3). The nucleotide sequence used as antigen comprising mutation.

(4). The nucleotide sequence used as antigen stating at the position between 1-192 and ending between 250-400 of E1 protein and stating position between 290-406 and ending at 623.

(5). The nucleotide sequence used as antigen stating at the position between 1-192 and ending between 250-400 of E1 protein and stating position between 290-406 and ending at 650.

(6). The nucleotide sequence used as antigen stating position between 1-192 and ending between 250-400 of E1 protein and stating position between 290-406 and ending at 661.

(7). The nucleotide sequence used as antigen stating position between 1-192 and ending between 250-400 of E1 protein and stating position between 290-406 and ending at 673.

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(8). The nucleotide sequence used as antigen stating position between 1-192 and ending between 250-400 of E1 protein and stating position between 290-406 and ending at 710.

(9). The nucleotide sequence used as antigen stating position between 1-192 and ending between 250-400 of E1 protein and stating position between 290-406 and ending at 715.

(10). The nucleotide sequence used as antigen stating position between 1-192 and ending between 250-400 of E1 protein and stating position between 290-406 and ending at 720.

(11). The nucleotide sequence used as antigen stating position between 1-192 and ending between 250-400 of E1 protein and stating position between 290-406 and ending at 746.

(12). The nucleotide sequence used as antigen stating position between 1-192 and ending between 250-400 of E1 protein and stating position between 290-406 and ending at 809.

II. Claim 55, drawn to a monoclonal antibody raised upon immunization with a particular HCV peptide sequence, classified in class 424, subclass 139.1.

If either of Groups II is elected, applicants are required to further select one of the antibodies against one of the following antigen respectively on the merit. This is not related to the species selection, because each of the antibodies has its own patentable weight and constitutes a distinctive invention.

- (1). The peptide sequence is in the region of SEQ ID NO: 56,
- (2). The peptide sequence is in the region of SEQ ID NO: 57,
- (3). The peptide sequence is in the region of SEQ ID NO: 58,
- (4). The peptide sequence is in the region of SEQ ID NO: 59,
- (5). The peptide sequence is in the region of SEQ ID NO: 53,
- (6). The peptide sequence is in the region of SEQ ID NO: 66,
- (7). The peptide sequence is in the region of SEQ ID NO: 67,
- (8). The peptide sequence is in the region of SEQ ID NO: 68,
- (9). The peptide sequence is in the region of SEQ ID NO: 72,

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- (10). The peptide sequence is in the region of SEQ ID NO: 73,
- (11). The peptide sequence is in the region of SEQ ID NO: 86.
- (12). The peptide sequence is in the region of SEQ ID NO: 87,
- (13). The peptide sequence is in the region of SEQ ID NO: 88,
- (14). The peptide sequence is in the region of SEQ ID NO: 83,
- (15). The peptide sequence is in the region of SEQ ID NO: 82.

III. Claim 56, drawn to a monoclonal antibody raised upon immunization with a particular HCV E2 conformational epitopes, classified in class 424, subclass 149.1.

If either of Groups III is elected, applicants are required to further select one of the antibodies against one of the following antigen epitopes respectively on the merit. This is not related to the species selection, because each of the antibodies has its own patentable weight and constitutes a distinctive invention.

- (1). The monoclonal antibody recognize epitope F,
- (2). The antibody recognizes the epitope of G,
- (3). The antibody recognizes the epitope of H or C,
- (4). The antibody recognizes the epitope of I.

IV. Claim 62-86, drawn to method for isolation of monoclonal antibody and the antibody raised against a particular HCV E2 conformational epitopes, classified in class 435, subclass 332.

If either of Groups IV is elected, applicants are required to further select one of the antibody against one of the following antigen respectively on the merit. This is not related to the species selection, because each of the antibodies has its own patentable weight and constitutes a distinctive invention.

- (1). The monoclonal antibody is against antigen of HCV E1 protein,
- (2). The monoclonal antibody is against antigen of HCV E2 protein,
- (3). The monoclonal antibody is against antigen of HCV E1/E2 complex.

The inventions are distinct, each from the other because of the following reasons:

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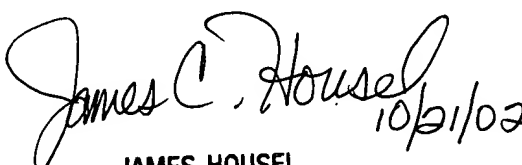
1. Inventions I-III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions of group I-IV are directed to different antibodies raised from different antigens, for example, the antibody of group II is raised from antigen peptide SEQ ID NO: 56 , whereas the antibody of group III raise against the antigen epitope F.
2. Because these inventions are distinct for the reasons given above , the search for group I, does not need to search group II, restriction for examination purposes as indicated is proper.
3. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Qun Li whose telephone number is 703-305-1695. The examiner can normally be reached on 8:00 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on 703-308-4027. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Bao Qun Li
October 21, 2002


JAMES HOUSEL
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600